

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

ONSAGERS AS
P.O. Box 6963 St. Olavs plass
N-0130 Oslo
NORVEGE

Frist notert:

25

PCT

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY
EXAMINING AUTHORITY

(PCT Rule 66)

Date of mailing
(day/month/year)

01.03.2006

Applicant's or agent's file reference
P03040

REPLY DUE

within 2 month(s)
from the above date of mailing

International application No.
PCT/NO2003/000440

International filing date (day/month/year)
23.12.2003

Priority date (day/month/year)
23.12.2003

International Patent Classification (IPC) or both national classification and IPC
B05B7/06

Applicant
YARA INTERNATIONAL ASA et al.

1. ☐ The written opinion established by the International Searching Authority:
☐ is ☒ is not
considered to be a written opinion of the International Preliminary Examining Authority
2. This first report contains indications relating to the following items:
 - ☒ Box No. I Basis of the opinion
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6. For an additional opportunity to submit amendments, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 23.04.2006

Name and mailing address of the international preliminary examining authority:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Brévier, F

Telephone No. +31 70 340-2816



**WRITTEN OPINION OF THE INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY**

International application No.
PCT/NO2003/000440

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this opinion is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed")*:

Description, Pages

1-12 as published

Claims, Numbers

1-11 as published

Drawings, Sheets

1/4-4/4 as published

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
 4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

**WRITTEN OPINION OF THE INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY**

International application No.
PCT/NO2003/000440

Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|-----------|
| Novelty (N) | Yes: Claims | 2-4, 6-10 |
| | No: Claims | 1, 5, 11 |
| Inventive step (IS) | Yes: Claims | 6-10 |
| | No: Claims | 1-5, 11 |
| Industrial applicability (IA) | Yes: Claims | 1-11 |
| | No: Claims | |

2. Citations and explanations:

see separate sheet

WRITTEN OPINION OF THE INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY
(SEPARATE SHEET)

International application No.

PCT/NO2003/000440

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following documents:

D1: US-A-4 701 353

D2: FR-A-2 522 991

D3: US-A-3 927 974

1 INDEPENDENT CLAIMS 1, 11

- 1.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1 and 11 is not new in the sense of Article 33(2) PCT.

The document D1 (see col. 6, l. 44-col. 7, l. 10; fig. 1 & 3) discloses (the references in parentheses applying to this document):

A spraying device *[suitable]* for melt granulation in fluidised bed comprising a nozzle with a feed channel (1) for a liquid to be atomised, where the liquid is led *[in use]* through emulsifying means (3) and into an internal mixing chamber (area around and downstream outlets 7 and 11 and upstream outlet opening G) for gas and liquid, before it is fed to the fluidised bed, whereby the nozzle has a separate channel (4) for the atomising gas fitted concentrically around the central liquid supply channel (1) for the liquid to be atomised or nebulised, and where the mixing chamber surrounds the outlet zone of the liquid spray from the emulsifying means (3) and the gas, *allowing efficient mixing of high speed atomisation gas and liquid*, and having an external gas cap where fluidisation gas is channelled *[in use]* (through channel 12, fig. 3) into a spout above the spraying device.

- 1.2 Documents D2 and D3 disclose also spraying devices which are **suitable for** melt granulation in fluidised bed (although not being intended to be used therefor) and which have all the technical features of claim 1.
- 1.3 Furthermore the spraying device disclosed in D1 is used for the preparation of

WRITTEN OPINION OF THE INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY
(SEPARATE SHEET)

International application No.

PCT/NO2003/000440

granules of urea (see example II, col. 8).

The subject-matter of independent claims 1 and 11 is not new in the sense of Article 33(2) PCT.

2 INDEPENDENT CLAIMS 9, 10

The combination of features of the claims 9 and 10 meet the requirements of the PCT in respect of novelty and inventive step (Article 33(2) and (3) PCT) since these features are neither known from, nor rendered obvious by, the available prior art.

3 DEPENDENT CLAIMS 2-5

3.1 Dependent claims 2-5 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1 and D2 of the available prior art.

3.2 Furthermore the terms "ratio L/D" and "l/d ratios" used in claims 3 and 4 are unclear and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby **rendering the definition of the subject-matter of said claims unclear, Article 6 PCT.**

4 DEPENDENT CLAIMS 6-8

The combination of features of the dependent claims 6-8 meet the requirements of the PCT in respect of novelty and inventive step (Article 33(2) and (3) PCT) since these features are neither known from, nor rendered obvious by, the available prior art.